

## **REMARKS**

In the Office Action dated August 15, 2008, the drawings were objected to for the reasons indicated on the Notice of Draftsperson's Patent Drawing Review, attached to the Office Action. In that Notice, Figures 1-4 were objected to based on the character of lines, numbers and letters. Applicant assumes this was due to the hand-drawn spring in each of those figures. New Figures 1-4 are submitted herewith that have been professionally prepared. The drawings are submitted to be in full compliance with all provisions of 37 C.F.R. §1.84.

Claims 1, 2 and 5-7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyazaki et al in view of Tobiasz. This rejection is respectfully traversed for the following reasons.

Applicant submits that the Miyazaki et al reference does not disclose a seal that is located between the valve body and the reactive body of the female assembly in the Miyazaki et al coupling. Since the only seal that is provided with a reference numeral in this general vicinity of the Miyazaki et al structure is the seal 64, Applicant assumes that the Examiner was referring to the seal 64 as corresponding to such a seal located *between* the valve body and the reactive body. Applicant argued that the seal 64 is not located between those parts.

The Examiner has now clarified this point, and has stated that the Examiner is relying on the component in Miyazaki et al that was not provided with a reference numeral, that is located at the extreme right of the sliding valve 66 in Figure 1 of Miyazaki et al. As noted, this component is not provided with a reference numeral and is nowhere discussed in the Miyazaki et al reference. Applicant therefore respectfully submits it is speculation on the part of the Examiner as to whether that

component is or is not a seal, or is even capable of performing a sealing function. Applicant notes that this element is triangular in shape, and appears to be received in a V-shaped annular groove at the end surface of the sliding valve 66. If this V-shaped element were intended to perform a sealing function, it seems that, due to its V-shape, it would provide non-uniform sealing, since it would be more resilient in a central area of the V-shape than at a periphery of the V-shape. It seems equally, if not more, likely that this V-shape element is provided for wear resistance, rather than as performing any type of sealing function.

Since the components in the Miyazaki et al reference that are clearly intended as seals have been described in extreme detail in the Miyazaki et al reference, Applicant submits that a person of ordinary skill reading the Miyazaki et al disclosure, who has not had the benefit of first reading Applicant's disclosure, would assume that the V-shaped element is not a seal, otherwise it would have been included in the detailed discussion in Miyazaki et al of the various seals in that coupling. If the V-shaped element does not even perform enough of a sealing function to merit inclusion in that detailed discussion, Applicant respectfully submits the Examiner's reliance, on that component as performing a sealing function in substantiating the rejection under Section 103(a), is only speculation, and is not supported by the rigorous evidence that is required to substantiate a rejection under 35 U.S.C. §103(a).

Additionally, the Examiner acknowledged that the Miyazaki et al reference does not disclose that the component in the Miyazaki et al coupling that the Examiner is equating with the "first valve body" of claim 1 of the present application has a recess therein that conforms in shape to a protruding part on the component in

Miyazaki et al that the Examiner is equating with the “second reactive body” of claim 1 of the present application. The Examiner has relied on the Tobiasz reference as providing such a teaching.

Applicant submits that the mating surfaces of the valve head 20 and the valve head 62 cannot be of a truly modified in the Miyazaki et al reference, because it is essential for the valve head to carry the packing layer 121 thereon. This packing layer 121 is an essential component of the overall sealing configuration in the Miyazaki et al reference, and any modification that would destroy or deteriorate the ability of the packing layer 121 to perform this sealing function would destroy the intended operation of the coupling disclosed in the Miyazaki et al reference, or at least would be a significant deterrent to a person of ordinary skill in the field of valve design making any changes that would effect the packing layer 121. Applicant submits it is speculation, unsubstantiated by anything in the Miyazaki et al reference, to assume that the packing layer 121 could be effective for sealing purposes if the valve heads 20 and 62 have respective shapes other than the slat abutting shapes shown in all embodiments of Miyazaki et al.

Consistent with this discussion, independent claims 1 and 5 have been amended to make clear that the recess and the protruding part in the subject matter of the present application mate in non-sealing abutment as the bottle is inserted into the vaporizer. Therefore, the mating of the recess and the protruding part in the subject matter of the present application does not contribute to the overall sealing of the coupling, and is not intended to do so. This is directly contrary to the overall underlying concept disclosed in the Miyazaki et al reference.


As noted above, the aforementioned considerations provide a strong deterrent as to why a person of ordinary skill in the field of valve design would not seek to modify the Miyazaki et al reference to change the shape of the valve heads 20 and 62 to have a shape as disclosed in the Tobiasz reference. Even if such a modification were made (or at least attempted), however, the clear teaching of the Miyazaki et al reference is that the packing layer 121 must be retained, and therefore in the version of Miyazaki et al modified by Tobiasz, in accordance with the Examiner's proposal, the valve heads 20 and 62 would not be in non-sealing abutment, as set forth in claims 1 and 7.

Applicant therefore submits that none of claims 1, 2 or 5-7 would have been obvious to a person of ordinary skill in the field of valve design, under the provisions of 35 U.S.C. §103(a), based on the teachings of Miyazaki et al and Tobiasz.

All claims of the application are submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested. The present Amendment is being filed simultaneously with an RCE, in order to permit entry and consideration of the above amendments following the final rejection.

The Commissioner is hereby authorized to charge any additional fees which may be required, or to credit any overpayment to account No. 501519.

Submitted by,



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